

Report for Tieman's Fusion Coffees

Sample ID	Brunswick Lab ID	ORAC _{hydro} * (μmoleTE/L)	ORAC _{lipo} (μmoleTE/L)	ORAC _{total} (μmoleTE/L)	HORAC ¹ (μmoleCAE/ L)	NORAC ² (μmoleTE/ L)	SOD [^] (kunitSODeq/L)
TT-001 Lot # 01	08-3099	70,099	2,083	72,182	8,110	6,337	501

*The ORAC analysis provides a measure of the scavenging capacity of antioxidants against the peroxy radical, which is one of the most common reactive oxygen species (ROS) found in the body. ORAC_{hydro} reflects water-soluble antioxidant capacity and the ^ ORAC_{lipo} is the lipid soluble antioxidant capacity. ORAC_{total} is the sum of ORAC_{hydro} and ORAC_{lipo}. Trolox, a water-soluble Vitamin E analog, is used as the calibration standard and the ORAC result is expressed as micromole Trolox equivalent (TE) per liter.

¹ Caffeic Acid is used as the calibration standard and the HORAC result is expressed as μmole Caffeic Acid equivalent (CAE) per liter.

² Trolox is used as the calibration standard and the NORAC result is expressed as μmole Trolox equivalent (TE) per liter.

[^] Superoxide Dismutase (SOD) is used as the calibration standard and the SOD result is expressed as kilo unit SOD equivalent (kunitSODeq.) per liter.

The acceptable precision of the ORAC assay is 15% relative standard deviation.¹⁻²

Testing performed by. Y.Kou & H.Ji

Approved by: _____
Boxin Ou, PhD.

B-8205a / 10-24-08 jo

Samples will be discarded one month from report date, unless otherwise notified by customer in writing.

¹ Ou, B.; Hampsch-Woodill, M.; Prior, R. L.; Development and Validation of an Improved Oxygen Radical Absorbance Capacity Assay using Fluorescein as the Fluorescent Probe. Journal of Agricultural and Food Chemistry.; **2001**; 49(10); 4619-4626

² Huang, D.; Ou, B.; Hampsch-Woodill, M.; Flanagan, J.; Deemer, E. K.; Development and Validation of Oxygen Radical Absorbance Capacity Assay for Lipophilic Antioxidants using Randomly Methylated -Cyclodextrin as the Solubility Enhancer. Journal of Agricultural and Food Chemistry.; **2002**, 50(7); 1815-1821.